

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	11559	(heat adj sink) and (transistor or MOSFET)	US-PGPUB; USPAT	OR	ON	2007/03/29 09:11
L2	3697	(heat adj sink) same (transistor or MOSFET)	US-PGPUB; USPAT	OR	ON	2007/03/29 09:52
L3	266	2 and ((epoxy near3 resin) or (synthethic near3 resin))	US-PGPUB; USPAT	OR	ON	2007/03/29 09:26
L4	178	3 and @ad<"20021007"	US-PGPUB; USPAT	OR	ON	2007/03/29 09:52
L5	2627	2 and @ad<"20021007"	US-PGPUB; USPAT	OR	ON	2007/03/29 10:22
L6	2449	5 not 4	US-PGPUB; USPAT	OR	ON	2007/03/29 09:53
L7	1597	6 and (drain or source)	US-PGPUB; USPAT	OR	ON	2007/03/29 09:28
L8	2078	(heat adj sink) same (transistor or MOSFET)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/29 09:26
L9	64	8 and ((epoxy near3 resin) or (synthethic near3 resin))	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/29 09:27
L10	852	6 not 7	US-PGPUB; USPAT	OR	ON	2007/03/29 09:53
L11	2076	(heat adj sink) with (transistor or MOSFET)	US-PGPUB; USPAT	OR	ON	2007/03/29 09:52
L12	1564	11 and @ad<"20021007"	US-PGPUB; USPAT	OR	ON	2007/03/29 09:53
L13	608	12 not 7	US-PGPUB; USPAT	OR	ON	2007/03/29 09:53
L14	501	13 not 4	US-PGPUB; USPAT	OR	ON	2007/03/29 10:18
L16	117	(heat adj sink) same punch	US-PGPUB; USPAT	OR	ON	2007/03/29 10:22
L17	79	16 and @ad<"20021007"	US-PGPUB; USPAT	OR	ON	2007/03/29 10:22

US-PAT-NO: 5972737

DOCUMENT-IDENTIFIER: US 5972737 A

TITLE: Heat-dissipating package for microcircuit devices and
process for manufacture

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Application Filing Date - AD (1):
19990125

Detailed Description Text - DETX (25):

The bonding between the pedestal 32 and the slab 33 is preferably done by welding, brazing or in accordance with one of the bonding techniques disclosed in connection with the earlier described embodiments of the invention. The bond must be able to withstand temperatures of 150 degrees Celsius (approximately 300 degrees F.) which can be generated in this type of power devices. Accordingly, any brazing material, solder or adhesive must have a melting temperature in excess of 180 degrees Celsius (approximately 350 degrees F.). This technique of using a relatively expensive CTE-matching composite pedestal on the portion of the **heat-sink** in direct contact with the **transistor** or other microcircuit elements from which heat has to be drained, can be applied to laser diodes and other high power components.

DOCUMENT-IDENTIFIER: US 20040042153 A1

TITLE: Heat sink processing method

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Application Filing Date - APD (1):

20020828

Summary of Invention Paragraph - BSTX (9):

[0007] The primary object of the present invention is to provide a **heat sink** processing method, by which method it is especially most suitable to use a conventional working machine as a **punch** press in cooperating with a knife set progressing in a bevel way and a feeding mechanism, the method can not only fast manufacture a **heat sink** of high efficiency, but also can manufacture with lower cost that is only 1/5 of a CNC.

Detail Description Paragraph - DETX (22):

[0035] 1. A **heat sink** with an increased surface area for heat sinking can be made just by using a **punch** press in cooperating with a knife set progressing in a bevel way and a feeding mechanism, each set of equipment only costs 800 thousands New Taiwan Dollar; this largely saves the cost for purchasing producing machines of high unit price, thereby, an effect of largely lowering the cost of production can be obtained.

Detail Description Paragraph - DETX (24):

[0037] 3. The method using a **punch** press of lower cost in cooperating with a knife set progressing in a bevel way and a feeding mechanism can complete the sequential actions of material feeding, rushing down, cut in a bevel way, abutting and knife retracting within a single stroke, it is about 1.2 folds faster than the production with an expensive CNC, thereby can increase the speed of production of the **heat sink** in a more economic and effective way.

Claims Text - CLTX (5):

4. The **heat sink** processing method as in claim 1, wherein, said working machine is a **punch** press, of which the process including the sequential actions of material feeding, rushing down, cut in a bevel way, abutting and knife retracting is completed within a stroke.

Claims Text - CLTX (8):

7. The **heat sink** processing method as in claim 6, wherein, when said cam rotates for 0-90.degree., said linked-up rod moves forwards said material block of said feeding mechanism to the position for cutting, and a **punch** is lowered; when said cam rotates for 90-180.degree., said linked-up rod is not moved, said **punch** is lowered to contact said knife set, said knife starts to move forward to cut in a bevel way; when said cam rotates for 180-270.degree., said linked-up rod is not moved, said **punch** is retracted, and said knife set is retracted too; when said cam rotates for 270-360.degree., said linked-up rod is moved back to its original position, said positioning rod is removed from a dial, so that said **punch** totally gets rid of said knife set progressing in a bevel way and restores to its original position.